REMARKS

Claims 1 – 3, 5, 6, 8 – 11, 14, 16 – 18, 21, 23, 26, 27, 30, 32 – 45, 48, 49 and 51 – 61 are in the instant application. Claims 1 –3, 5, 6, 8 –11, 14, 16, 26, 27, 30, 32 – 40, 45, 49 and 51 - 53 are allowed. Claims 17, 18, 21, 23, 41 – 44, 48 and 54 – 61 are rejected. Claims 17, 18, 41, 42, 44, 54 and 58 – 61 are amended to more positively recite applicants' patentably novel coated article and method of making a coated article. Claims 62 – 66 are added to set forth applicants' patentably novel coated article and method of making a coated article in varying scope.

Claims 17, 18, 21, 23, 41 and 58 – 60 are rejected under 35 U.S.C. 112, first paragraph. Claims 17, 18, 41 and 58 – 60 are independent claims, and claims 21 and 23 are dependent on claim 18. The Office Action states that the specification is enabling for a breaker layer comprising a phosphorous containing metal oxide or a mixed oxide of tin and silica, and alleges that the specification does not reasonably provide enablement for a breaker layer comprising any metal oxide(other than tin oxide) with silica.

Applicants respectfully traverse the rejection of claims 17, 18, 21, 23, 41 and 58 – 60 under 35 U.S.C. 112, first paragraph; however, to eliminate this issue, claims 17, 18, 41 and 58 – 60 are amended to recite, among other things, in one form or another that the breaker layer is selected from the group of a metal oxide layer having at least phosphorous and a mixed oxide layer of tin and silica. Support for the amendments to claims 17, 18, 41 and 58 – 60 is found, among other places, in the claims in the application. Based on the foregoing, Applicants respectfully request admittance of the amendments to claims 17, 18, 41 and 58 – 60, and consideration of claims 17, 16, 21, 23, 41 and 58 – 60.

Applicants respectfully submit that claims 17, 18, 21, 23, 41 and 58 - 60 meet the requirements of 35 U.S.C. 112, first paragraph, and respectfully request withdrawal of the rejection of claims 17, 18, 21, 23, 41 and 58 - 60 under 35 U.S.C. 112, first paragraph, and request allowance of claims 17, 18, 21, 23, 41 and 58 – 60.

Claims 44 and 61 are rejected under 35 U.S.C. 112, second paragraph. The Office Action alleges that the relationship claimed between

the thickness of the first layer and the thickness of the second layer is unclear. The Office Action asks for clarification.

Applicants respectfully traverse the rejection of claims 44 and 61 under 35 U.S.C. 112, second paragraph; however, to eliminate this issue, claims 44 and 61 have been amended to recite, among other things, in one form or another, that first and second transparent, conductive layers provide a solar control multi-layer having a predetermined emissivity, total solar energy transmission and visible light transmission, and wherein for thickness increases of the first layer within its thickness range, the thickness of the second layer decreases within its thickness range to alter the total solar energy transmission and the visible light transmission.

Support for the amendment to claims 44 and 61, is found, among other places, on page 33, line 1, to page 34, line 2, of the specification. Based on the foregoing , applicants respectfully request admittance of the amendments to claims 44 and 61 and consideration thereof. Further, applicants respectfully submit that claims 44 and 61 meet the requirements of 35 U.S.C. 112, second paragraph, and respectfully request withdrawal of the rejection of claims 44 and 61 under 35 U.S.C. 112, second paragraph.

Claims 42 – 44, 48 and 54 – 56 are rejected under 35 U.S.C 102(e) as being anticipated by USPN 6,218,018 to McKown et al. (hereinafter also referred to as "McKown"). Applicants respectfully traverse the rejection of claims 42 – 44, 48 and 54 – 56 under 35 U.S.C. 102(e) as being anticipated by McKown and request reconsideration thereof.

Consider claims 42 – 44; claim 42 is an independent claim having claims 43 and 44 dependent thereon. Claim 42 is amended to recite a coated article having, among other things, a substrate, a graded color suppression layer and a first substantially transparent, conductive metal oxide layer deposited over the color suppression layer. The conductive metal oxide layer is about 700Å to about 3000Å thick. The color suppression layer deposited over the at least a portion of the substrate is about 50Å to about 3000Å thick, and includes, among other things, first and second metal oxides deposited over at least a portion of the substrate and selective present in three coating regions of the layer. More particularly, the first coating region,

includes the first metal oxide and substantially no second metal oxide; the second or transition region is deposited over the first region and has the first metal oxide and the second metal oxide, with the ratio of the first metal oxide to the second metal oxide constantly changing with distance from the substrate, and the third coating region is deposited over the second coating region and has the second metal oxide and substantially no first metal oxide.

Claim 44 is amended and was discussed above.

Support for the amendment to claim 42 is found, among other places, in the originally filed claims. Based on the foregoing, applicants respectfully request admittance of the amendment to claim 42 and reconsideration of claims 42 – 44.

Applicants respectfully submit that there is no teaching in McKown of the color suppression layer recited in claim 42 having a thickness of about 50Å to about 3000Å.

Consider now claim 48. The Office Action states that the examiner asserts that the antimony doped tin oxide layer has a lower refractive index than the fluorine doped tin oxide layer. Applicants have no issue with the above statement by the examiner; however, the issue is whether McKown discloses all the features of claim 48. More particularly, claim 48 recites that the index of refraction of the antimony doped tin oxide is lower than the index of refraction of the second doped metal oxide; that the second doped metal oxide is deposited over the antimony doped tin oxide, and that the second metal oxide is selected from a group that includes fluorine doped tin oxide, indium doped tin oxide and mixtures thereof. Applicants respectfully submit that there is no discussion in McKown of a coated article having a coating of a metal oxide over a coating of antimony doped tin oxide where the index of refraction of the antimony doped tin oxide is lower than the index of refraction of the metal oxide, e.g. a fluorine doped tin oxide. Since McKown does not disclose the features of applicants' claim 48, McKown cannot anticipate applicants' claim 48.

As is appreciated, the addition of dopants to a metal oxide, e.g. tin oxide lowers the index of refraction of the tin oxide. The same weight percent of different dopants, lowers the index of refraction different amounts. To determine if the coated article disclosed in McKown anticipates applicants'

claim 48, McKown has to disclose the weight percent of fluorine in a tin oxide film and the weight percent of antimony in a tin oxide film, and a coating structure that has the fluorine doped tin oxide film over the antimony doped tin oxide film.

Consider now claims 54 – 56; claim 54 on which claims 55 and 56 are dependent is amended and recites, among other things, a first coating region having a metal oxide and a first dopant; a third coating region having a metal oxide and a second dopant, and a region between the first and third region having a metal oxide, the first dopant and the second dopant with the ratio of the first dopant to the second dopant constantly changing with the distance from the substrate wherein the first coating region is substantially free of the second dopant and the third region is substantially free of the first dopant. Support for the amendment to claim 54 is found, among other places, in the claims on file. Based on the foregoing, applicants respectfully request admittance of the amendment to claim 54 and consideration of claims 54 – 56.

NO

The film in Fig. 3 of McKown has a dopant gradient with the NIR dopant having a higher concentration than the other dopant at one surface of the film and the low emissivity dopant having a higher concentration than the other dopants at the other surface of the film. Unlike applicants' claim 54 which has two regions, the first coating region and the third coating region, each having a different dopant, Fig. 3 of McKown has two dopants throughout the coating with the concentrations of the dopants changing to provide a gradient (column 7, lines 22 – 27, of McKown). In other words, McKown has only one region.

McKown fails to teach the three regions recited in applicants' claim 54 and therefore McKown cannot anticipate the subject matter recited in applicants' claims 54 – 56.

Based on the foregoing, applicants respectfully request withdrawal of the rejection of claims 42 – 44, 48 and 54 – 56 under 35 U.S.C. 102(e) as being anticipated by McKown and request allowance of claims 42 – 44, 48 and 54 – 56.

Claims 57 and 61 are rejected under 35 U.S.C. 103(a) as being unpatentable over McKown as applied above in view of U.S. Patent No.

5,356,718 to Athey et al. (hereinafter also referred to as "Athey"). Applicants respectfully traverse the rejection of claims 57 and 61 under 35 U.S.C. 103(a) as being unpatentable over McKown in view of Athey and request reconsideration thereof. Claim 57 is dependent on claim 54 discussed above and recites that the color suppression between the first region and the substrate comprises a gradient layer which transitions from one metal oxide or nitride to another.

Claim 54 and McKown were discussed above.

Applicants have shown above that McKown does not anticipate applicants' invention as set forth in claim 54. More particularly, McKown shows only one region whereas applicants show a three region coating having a dopant in the first region, a different dopant in the third region and both dopants in the transition region between the first and third regions. There is no discussion in McKown of providing a gradient color suppression layer between a layer having three regions as recited in applicants' claim 54 and a substrate. Athey does not cure the defect of McKown, and therefore, the combination of McKown and Athey cannot disclose applicants' patentably novel coated article recited in claim 57.

Regarding claim 61, the Office action alleges that McKown discloses that the gradient layer may have a thickness of between 50 to 3000Å (column 2, lines 19 – 38). Claim 61 was discussed above. There is no disclosure in McKown and/or Athey of the step recited in claim 61 of increasing the thickness of the first layer within its thickness range while decreasing the thickness of the second layer within its thickness range to alter the solar properties of the coated article.

Based on the foregoing, applicants respectfully request admittance and consideration of claims 57 and 61; request withdrawal of the rejection of claims 57 and 61 under 35 U.S.C. 103(a) as being unpatentable over McKown in view of Athey, and request allowance of claims 57 and 61.

Applicants have added new claims 62 – 66. Claims 62 – 66 are dependent on claims 44, 48, 54, 56 and 61, respectively. Support for claims 62 – 66 is found, among other places, in the claims on file. The argument to patentably distinguish claims 44, 48, 54, 56 and 61 over the art is applicable, among others, to patentably distinguish claims 62 – 66 over similar are.

Based on the foregoing, applicants respectfully request admittance, consideration and allowance of claims 62 – 66.

This amendment represents a sincere effort to place the application in condition for allowance. In the event issues remain, the Examiner is invited to call the undersigned to discuss those issues before further action is taken on the case.

Respectfully submitted,

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